

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year)

07 April 2000 (07.04.00)

International application No.

PCT/US99/19204

Applicant's or agent's file reference

7253/VB

International filing date (day/month/year)

24 August 1999 (24.08.99)

Priority date (day/month/year)

24 August 1998 (24.08.98)

Applicant

STRANG, Janine, Morgens et al

1. The designated Office is hereby notified of its election made:

☒

in the demand filed with the International Preliminary Examining Authority on:

21 February 2000 (21.02.00)

☐

in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

F. Baechler

Telephone No.: (41-22) 338.83.38

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 7253/VB	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 99/ 19204	International filing date (day/month/year) 24/08/1999	(Earliest) Priority Date (day/month/year) 24/08/1998
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/19204

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D17/00 D06L1/04 D06M13/148 D06L1/06 D06M23/16
 D06M23/02 D06L1/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D D06M D06L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 789 368 A (YOU ET. AL.) 4 August 1998 (1998-08-04) cited in the application column 43, line 46 column 2, line 55 -column 3, line 64 ----	1,5,8-10
A	US 4 472 166 A (SANDO ET.AL.) 18 September 1984 (1984-09-18) column 2, line 12 - line 55 ----	1,5
A	EP 0 330 979 A (CHEMISCHE FABRIK PFERSEE GMBH) 6 September 1989 (1989-09-06) page 2, line 1 - line 4 page 2, line 32 -page 3, line 46 ----- -/--	1,5



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

22 December 1999

Date of mailing of the international search report

11/01/2000

Name and mailing address of the ISA

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 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Ketterer, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/19204

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE WPI Week 9031 Derwent Publications Ltd., London, GB; AN 1990-237191'31! XP002126502 B. MELNIKOV ET. AL.: "Treatment of textil material" & SU 1 516 553 A (IVAN CHEM. TECH. INST.), 23 October 1989 (1989-10-23) abstract ---	1,5
A	WO 96 30471 A (THE PROCTER & GAMBLE COMPANY) 3 October 1996 (1996-10-03) page 1, line 12 -page 3, line 8 & US 5 630 847 A cited in the application ---	1,5,9,10
A	WO 97 32004 A (THE PROCTER & GAMBLE COMPANY) 4 September 1997 (1997-09-04) page 3, paragraph 3 -page 7, paragraph 1 ---	1,5,9,10
P,A	EP 0 867 556 A (DAI-ICHI KOGYO SEIYAKU CO., LTD.) 30 September 1998 (1998-09-30) page 2, line 28 - line 47 -----	1,5

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/19204

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5789368	A	04-08-1998	BR 9707077 A	20-07-1999
			CA 2243539 A	31-07-1997
			EP 0894160 A	03-02-1999
			JP 11503058 T	23-03-1999
			WO 9727354 A	31-07-1997
US 4472166	A	18-09-1984	JP 1053393 B	14-11-1989
			JP 1569560 C	10-07-1990
			JP 59076967 A	02-05-1984
EP 330979	A	06-09-1989	DE 3807030 A	14-09-1989
			AT 95255 T	15-10-1993
			DE 58905718 D	04-11-1993
			DK 95889 A	05-09-1989
			JP 2084556 A	26-03-1990
			US 5021264 A	04-06-1991
			US 5021263 A	04-06-1991
SU 1516553	A	23-10-1989	NONE	
WO 9630471	A	03-10-1996	US 5630847 A	20-05-1997
			BR 9607895 A	29-06-1999
			CA 2216849 A	03-10-1996
			EP 0817881 A	14-01-1998
			JP 11502885 T	09-03-1997
			US 5942484 A	24-08-1999
WO 9732004	A	04-09-1997	EP 0885291 A	23-12-1998
			JP 11505569 T	21-05-1999
			US 5840675 A	24-11-1998
EP 867556	A	30-09-1998	JP 10266077 A	06-10-1998
			CN 1194823 A	07-10-1998

XP-002126502



AN - 1990-237191 [31]
A - [001] 014 03- 252 253 32& 331 402 408 409 466 470 472 481 483 541 542
547 551 560 566 597 598 664 667
AP - SU19874230202 19870414
CPY - IVAN-R
DC - A11 E12 F06
DR - 1713-U
FS - CPI
IC - D06M1/02
IN - BELOKUROVA O A; KIRILLOVA M N; MELNIKOV B N
KS - 0229 1982 2386 2482 2483 2486 2499 2500 2528 2601 2604 2628 2657 2821
MC - A03-A05A A11-C05 A12-S05R F01-H06 F03-C04
M3 - [01] J0 J012 J1 J171 J2 J271 K0 K4 K431 M220 M222 M223 M224 M225 M226
M231 M232 M233 M272 M281 M312 M321 M332 M343 M349 M381 M391 M416 M620
M782 M903 M904 Q130 Q322 R023; 9031-D8401-M; 1327-U 0502-U
- [02] C500 C730 C800 C801 C802 C804 C806 C807 M411 M782 M903 M904 M910
Q130 Q322 R023; R01713-M; 1327-U 0502-U
PA - (IVAN-R) IVAN CHEM TECH INST
PN - SU1516553 A 19891023 DW199031 000pp
PR - SU19874230202 19870414
XA - C1990-102892
XIC - D06M-001/02
AB - SU1516553 The basic fibre is preliminarily impregnated with an aq.
soln. contg. 4-6 g/l of the proposed auxiliary disodium salt of
sulphosuccinic acid mono-ester (based on synthetic fatty alcohols from
the second unsaponified 8-20C fraction) and then dried. As previously,
the method involves treatment with liq. ammonia and an auxiliary
textile cpd.
- Typically, after impregnation the fabric is dried and the impregnating
with liq. ammonia for approx. 1 sec. The ammonia is then removed by
hot or cold water prior to drying the fabric at 90 deg.C. Tests show
that the proposed and previous method give results (expressed for
warp/weft):coefft. of stiffness, 3.7/3.0 and 9.5/7.2; fold restoration
after crumpling 145 and 87 deg.; wear resistance 1245 and 691 cycles;
shrinkage 0/0 and 2.8/-1.8%.
- USE/ADVANTAGE - Reduced stiffness and Increased wear-resistance,
crease-resistance and stability of linear dimensions in fabric
composed of viscose fibre or its mixt. with cotton and all are all
obtd. from the proposed treatment of textile material, esp. in the
finishing Industry. Bul. 39/23.10.89 (3pp Dwg.No.0/0)
CN - 9031-D8401-M R01713-M
DRL - 0502-U 1327-U
IW - TREAT TEXTILE MATERIAL LIQUID AMMONIA PRELIMINARY TREAT SOLUTION DI
SODIUM SALT SULPHO SUCCINIC ACID MONO ESTER IMPROVE QUALITY FIBRE
IKW - TREAT TEXTILE MATERIAL LIQUID AMMONIA PRELIMINARY TREAT SOLUTION DI
SODIUM SALT SULPHO SUCCINIC ACID MONO ESTER IMPROVE QUALITY FIBRE
INW - BELOKUROVA O A; KIRILLOVA M N; MELNIKOV B N
NC - 001
OPD - 1987-04-14
ORD - 1989-10-23
PAW - (IVAN-R) IVAN CHEM TECH INST

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

15

Applicant's or agent's file reference 7253/VB		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/19204	International filing date (day/month/year) 24/08/1999	Priority date (day/month/year) 24/08/1998	
International Patent Classification (IPC) or national classification and IPC C11D17/00			
Applicant THE PROCTER & GAMBLE COMPANY et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none">I <input checked="" type="checkbox"/> Basis of the reportII <input type="checkbox"/> PriorityIII <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicabilityIV <input type="checkbox"/> Lack of unity of inventionV <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statementVI <input type="checkbox"/> Certain documents citedVII <input checked="" type="checkbox"/> Certain defects in the international applicationVIII <input checked="" type="checkbox"/> Certain observations on the international application			
Date of submission of the demand 21/02/2000		Date of completion of this report 11.09.2000	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Diebold, A Telephone No. +49 89 2399 8442 	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/19204

I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

Description, pages:

1-19 as originally filed

Claims, No.:

1-10 as originally filed

Drawings, sheets:

1/1 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/19204

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-10
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-10
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-10
	No:	Claims	

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/19204

Item V:

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement.

- 1) Reference is made to the following documents D1 and D2.

D1 = US-A-5,789,368

D2 = WO-A-97/32004

The document D3 was not cited in the International Search Report.

D3 = WO-A-93/23603

- 2) Problem

The present invention pertains to compositions and articles containing these compositions which are designed to clean and refresh delicate fabrics in an in-home non-immersion cleaning and refreshing process while minimizing shrinkage of the fabrics.

Solution

This problem has been solved by a composition for treating fabrics, comprising:

a) a fabric shrinkage reducing composition selected from the group consisting of ethylene glycol, all isomers of propanediol, butanediol, pentanediol, hexanediol and mixtures thereof, and

b) a liquid cleaning / refreshment composition containing water and a member selected from the group consisting of surfactants, perfumes, preservatives, bleaches, auxiliary cleaning agents, organic solvents and mixtures thereof.

The fabric shrinkage reducing composition and the liquid cleaning / refreshment composition are releasably absorbed in a substrate in a weight ratio of from 1:2 to 1:5.

It has been found that the fabric shrinkage composition when used with a cleaning / refreshment composition within defined ratios, can reduce the amount of shrinkage that occurs during an in-home, non-immersion cleaning and refreshing process which is conducted in a clothes dryer.

Also provided in this invention are a non-immersion cleaning / refreshment process using this composition, a kit containing the necessary items to conduct the process of this invention, and a sheet for releasably absorbing the composition of this invention.

Novelty / Inventive step

Documents D1 and D2 pertain to a fabric dry cleaning or refreshment process which is conducted in a hot air clothes dryer using a vapour-releasing containment bag. Vapour is vented from the bag during use, thereby minimizing wrinkling in the clothes being cleaned, and removing malodours therefrom. Additionally, D1 and D2 also encompass a liquid cleaning / refreshment composition as defined in the present claims 2-4, releasably contained in an absorbent carrier substrate in sheet form, as well as a kit containing the necessary items to conduct the cleaning process. However, these documents D1 and D2 are completely silent concerning the presence of a fabric shrinkage reducing composition selected from organic compounds as defined in present claim 1.

D3 relates to a process for dry-cleaning soiled fabric articles, conducted in a rotary clothes dryer at an elevated temperature, in a closed system such as a sealed plastic bag, wherein said system also includes a fabric-cleaning substrate (i.e. a sheet) impregnated with a gelled solvent-based dry-cleaning composition. Said gelled composition consists essentially of 40-95% water, 0.25-5% of a gelling agent, 2-32% of a water miscible organic solvent and 1-10% surfactant (see claim 1). Useful organic gelling agents can include waxy polyethylene glycols (PEG). The major portion of the organic solvent will be a glycol ether, even if liquid polyethylene glycols, ethylene glycol or propylene glycol can be employed as co-solvents. However, the present invention differs from D3 in that the substrate contains more fabric shrinkage reducing compounds (from 16.7% to 33%) than in D3 (from 0.25% to 5%).

Therefore, the subject-matter of claims 1-10 complies with the requirement of Article 33(2) PCT.

With regard to inventive step, there is no indication, nor incentive in the available prior art which discloses or even suggests to the person skilled in the art, that the mixture of certain organic compounds (ethylene glycol, all isomers of propanediol,

butanediol, pentanediol, hexanediol and mixtures thereof) with a cleaning / refreshment composition within defined ratios would reduce the amount of shrinkage that occurs during an in-home, non-immersion cleaning and refreshing process. In D3, the polyethylene glycols, ethylene glycol or propylene glycol are used as a gelling agent or as co-solvents. Additionally, D3 is not concerned by the problem of minimizing shrinkage of the fabrics. It has been shown in the present application, that such a mixture exhibits better results in terms of shrinkage reduction when compared to garments treated in an identical process using only the cleaning / refreshment composition. Moreover, it has been shown that using the shrinkage reducing composition on one substrate and the cleaning / refreshment composition on a second substrate does not provide the shrinkage reduction observed when the two compositions are releasably absorbed onto the same substrate.

Accordingly, the present claims 1-10 involve an inventive step, and the subject-matter of claims 1-10 complies with the requirement of Article 33(3) PCT.

- 3) Claims 1-10 meet the requirement under Article 33(4) PCT, because the present invention is industrially applicable in the field of detergents.

Item VII:

Certain defects in the international application.

The following defects in the form or contents of the international application have been noted:

- 1) The units of measure "mils" (pages 4 and 18) and temperature "°F" (page 18) are not additionally expressed in terms of the units stipulated by Rule 10.1(a) and (b) PCT.
- 2) References to US documents should have been mentioned with the US patent publication numbers instead of the following co-pending US provisional patent application numbers "08/789,171" (page 7), "60/077,556" (page 9) and "09/042,418" and "60/077,955" (page 12).

Item VIII:

Certain observations on the international application.

The following observations on the clarity of the claims, description and drawings or

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/19204

on the question whether the claims are fully supported by the description, are made:

- 1) The organic compounds "polyethylene glycol" and "1-octanol" recited in the preferable embodiment of claims 1, 5 and 10 do not fall within the general definition of the fabric shrinkage reducing composition, which is selected from the group of ethylene glycol, all isomers of propanediol, butanediol, pentanediol, hexanediol and mixtures thereof.

- 2) The dependencies of the following claims are not correctly expressed.

Claims 6 and 7: These two claims refer back to claims 1-5. However, claims 1-4 are concerned with a composition for treating fabrics, while claims 6 and 7 define a process. Thus, said claims 6 and 7 should only refer back to claim 5.

Claim 8: The fabric shrinkage reducing composition and the liquid cleaning / refreshment composition have been defined in claims 1-4, while claims 5-7 are concerned with a process.

Claim 9: This claim refers back to claims 1-8. However, claims 1-4 and 5-7 are concerned, respectively, with a composition for treating fabrics and a process, while claim 9 pertains to a kit. Thus, said claim 9 should only refer back to claim 8.

- 3) The term "preferably" used in claims 1, 2, 4, 5 and 10 introduces ambiguity. Since it has no limiting effect on the scope of the claims, the feature following this expression is to be regarded as entirely optional (Guidelines C-III, 4.6 PCT). Thus, for the sake of clarity and in order to precisely define the scope of said claims, the "preferable" embodiments should have been specified as mandatory features of additional dependent claims.
- 4) The use of the expression "incorporated herein by reference" in connection with prior art documents introduces ambiguity (Guidelines C-II, 4.17 PCT).